

## 2.1a Limits

Write a sentence to explain the meaning of the following expression to someone who has not had calculus:  $\lim_{h \rightarrow 0} 4 + h = 4$

Estimate the following limits using graphical, numerical and symbolic methods:

$$\lim_{x \rightarrow 1} (x + 1)$$

Aug 30-7:02 PM

$$\lim_{x \rightarrow 0} \frac{x^2 - 1}{x - 1}$$

$$\lim_{x \rightarrow 1} \begin{cases} \frac{x^2 - 1}{x - 1}, x \neq 1 \\ 1, x = 1 \end{cases}$$

Aug 30-7:14 PM

$$\lim_{x \rightarrow 0} \frac{\sin(x)}{x}$$

$$\lim_{x \rightarrow 0} \frac{\tan(x)}{x}$$

Aug 30-7:19 PM

$$\lim_{x \rightarrow 2} \frac{x^3 - 1}{x - 2}$$

Aug 30-7:38 PM

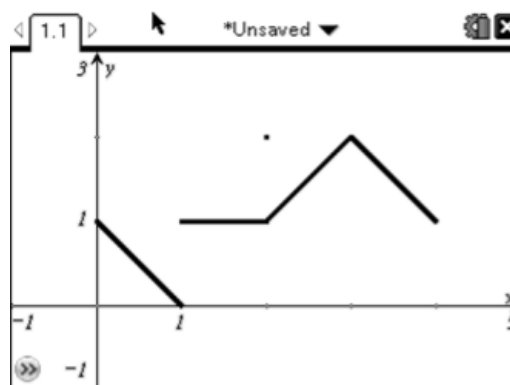
One-sided limits

$$\lim_{x \rightarrow c^+} f(x)$$

$$\lim_{x \rightarrow c^-} f(x)$$

Aug 30-7:40 PM

Example 8



Aug 30-7:43 PM